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ABSTRACT

This is the fourth and final report in a series dealing with the impact of the modes of discourse (description, narration, exposition, and argumentation) on written syntactic complexity at the elementary school level. The first three reports dealt in turn with the three grade levels involved in the study (third, fourth, and fifth grades). This report summarizes grade-level findings and investigates across-grade differences between the 153 writers involved. The findings indicate that writers at these grade levels are influenced to a significant degree by the mode of discourse invoked by their writing assignment: different modes invoke different syntactic resources, reflected in such measures as T-unit length, clause length, and clauses per T-unit. (AA)

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THE IMPACT OF MODE ON WRITTEN SYNTACTIC COMPLEXITY

PART IV--ACROSS-THE-GRADES' DIFFERENCES AND GENERAL SUMMARY

by

John D. Perron

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This is the fourth and final report in a series dealing with the impact of the modes of discourse on written syntactic complexity at the elementary school level.

Parts I, II, and III have revealed that writers of different levels of ability within each of three grade levels produce significantly different levels of syntactic complexity across the four modes or argumentation, exposition, narration, and description. At each level, students write their most complex syntax in the mode of argumentation, and their least complex syntax in the mode of description.

This report, Part IV, summarizes grade level findings and investigates the across-the-grades' differences among the 153 third-, fourth-, and fifth-grade writers involved.

Background

The over-all study developed from recent advances in research regarding the maturing writer in school. Children move through a developmental sequence in learning to write, increasing their syntactic complexity as they move through the grades. Researchers refer to "syntactic complexity" when they analyze the way sentences become more complex. To measure syntactic complexity, Hunt (1965) developed the T-unit, or "minimal terminable unit," which takes into consideration the main clause and all subordinate or non-clause elements attached to it.

The procedures used for segmenting the written productions into T-units were similar to those used by Hunt (1965), O'Donnell, Griffin, and Norris (1967), and O'Hare (1973). The syntactic factors investigated in this study were chosen because they have been shown by Hunt to correlate with chronological and mental age. Also, they were among the 23 variables shown by San Jose to be significantly discriminating across the four modes.

In Hunt's cross-sectional study of writing at three grade levels, fourth graders wrote an average of 8.6 w/T, eighth graders 11.5 w/T, and twelfth graders 14.4 w/T. This translates to fourth graders writing at 60 per cent, and eighth graders at 80 per cent, of their twelfth-grade potential in average T-unit length.

In a longitudinal study by Loban (1976), the communication unit was used to measure syntactic development across the grades (K-12), in oral and written language. Loban compares his unit with Hunt's T-unit, with the difference being that communication units include one-word responses (which mainly occur in speech). Loban's random group writing means showed fourth graders producing an average of 8.02 words per communication unit (w/CU), eighth graders 10.37 w/CU, and twelfth graders 13.27 w/CU.

The developmental trends demonstrated in both studies reveal an eight-year potential gain of more than five words, regardless of the unit being measured. However, neither study took into consideration the changes in syntax occasioned by writing in different modes of discourse.

The present study refers to the classical distinctions among the modes of discourse: arguing a point of view (argumentation), explaining a process (exposition), telling a sequence of events (narration), and depicting details (description).

Seegars (1933) initiated mode-based research with a study of the numbers of dependent clauses in the writing of fourth-, fifth-, and sixth-grade students. Seegars' study revealed that argumentation accounted for the most dependent clauses, followed by exposition, then narration-description (which were lumped together as one mode).

San Jose (1972) used Hunt's T-unit method of analysis to study fourth-grade writings by mode. Her results reaffirmed Seegars' claims, revealing similar, significant differences in syntactic complexity by mode in one grade.

The present cross-sectional study reported on here has attempted to investigate three grade levels, like Seegars, using Hunt's T-unit methods, like San Jose. The grade-level reports (Parts I, II, III) have referred to several other studies that deal with syntax and the modes . The over-all findings of the different grade level reports consistently reveal mode as a significant variable in the writing of students in the third, fourth, and fifth grades.

This report, Part IV, summarizes the findings at each grade level and investigates the differences in syntactic complexity across the grades.

Design of the Study

In October 1975, a three-grade study was begun to investigate the range of written syntactic complexity across the modes of discourse. Some 153 students at the third-, fourth-, and fifth-grade levels were involved in the study. All were white and represented rural, smalltown, and suburban communities in the metropolitan Atlanta area of Georgia.

The six female teachers involved were coached in the same procedures for collecting the writings via pre-determined, mode-based topics. This involved four writing events, administered by the teachers during 20-minute timed periods in mid-morning, over a two-week period. Only two writings were collected each week, both at two-day intervals.

The teachers read the topics aloud and involved their classes in five-minute discussion periods before starting each writing session. Spelling and handwriting were not crucial concerns for the children; they were told that the papers would not be graded. They also were informed that the writings were to be used to learn more about how children at their grade level learned to write.

Each writing topic was printed on a separate 8 x 10 sheet, preceded by lines for the student's name, name of school, and date. The papers contained triple-spaced lines on the topic side, and students were allowed to continue writing on the other side, if they filled up the front. The topics, according to the mode, were:

Argumentation: "Children may someday go to school all year long. Some children in San Diego, California, do it now. Do you think it is a good idea? Why or why not?"

Exposition: "Where do you go and what do you do after school? Do you have a special place to go, a job to do, a friend to play with? Would you like to take a new friend with you after school? What can you tell about the best thing to do after school?"

Narration: "Tell about a TV show that you like a lot. What happens in the show? How does it make you feel? Do you think other children would like it, too?"

Description: "Write about yourself. Tell what you look like. Tell what you like to do. What is your school like? What does your classroom look like? What do you do there? What do you do at recess? What is your favorite subject in school?"

In any mode-based study, it should be pointed out that the concept of "mode" is not a pure one. The fact that children are stimulated to write in the mode of argumentation, for example, does not mean they will write in an argumentative way exclusively. Modes of writing overlap; children writing in exposition may take time out from their explanation to argue what's best at a critical point, to describe an entity being used, and even to narrate a related anecdote. This mixing of modes occurs in all writing.

With this in mind, the over-all study defines mode as a production in which the writer's attention is directed in one of the following ways:

1. In using language that--in the main--argues a point of view, defends a position, expresses an emotional inclination, or tries to persuade, the writer is considered to be writing in the mode of argumentation.

2. In using language that--in the main--explains a procedure or an experience (in a restricted framework), the writer is considered to be writing in the mode of exposition.

3. In using language that--in the main--tells a sequence of events, observances, or experiences, the writer is considered to be writing in narration.

4. In using language that--in the main--depicts people, places things, and/or events in detail, the writer is considered to be writing in description.

The papers included in this study were those that met the above criteria. Some 612 writings were analyzed as representing production in the four modes for 153 students. Neither the content nor quality of the writings was studied, since no funds were available for a more elaborate undertaking. Thus, only syntactic complexity is studied in this investigation.

Syntactic complexity in this study concerns three factors: 1) words per T-unit (w/T), which refers to average T-unit length; 2) clauses per T-unit (c/T), which refers to the average number of main and subordinate clauses occurring inside a T-unit; and 3) words per clause (w/c), which refers to the average clause length inside a T-unit.

High, middle, and low subgroups were established by means of reading comprehension scores obtained from the Gates-McGinitie tests administered in April 1975. Twelve of the 153 students involved were recent transfers. Lacking such scores, they were not included in the subgrouping procedures, leaving 141 students for assignments to the high, middle, and low groups. Instead of raw scores, grade equivalent scores were used for consistency across the grades.

The statistical procedures used in the grade-level studies included Pearson's r, analysis of variance, t-test (Nie, 1975), and repeated measures procedures (Dixon, 1973). For the across-the-grade tests of the present report, one-way analysis of variance procedures were used, along with Student-Newman-Keuls a posteriori contrasts tests (Nie, 1975). All tests were run on the IBM 360-370 systems, with the support of the Educational Research Laboratory at the University of Georgia.

Summary of Grade-Level Findings

The following summary information (with tables) is presented to provide background information regarding the grade-level findings reported in the previous reports. The tables group the separate grade-level findings together for the first time. Thus, information from the earlier reports is here assembled to provide an over-all picture. This will provide the background information necessary for the ensuing across-the-grades findings.

The ability groupings at each grade level were established through comparison of their T-unit length mean differences as measured by repeated measures procedures. Table 1 summarizes the three grade-level findings, showing consistent results. Low ability students wrote at low syntactic levels, middle ability students wrote at middle syntactic levels, and high ability students wrote at high syntactic levels. The differences at each grade were statistically significant at or beyond the .001 level.

Table 1

Distribution Across Ability Groups of T-unit Length Means at each Grade Level

		Ability Group						
Grade	n	Low	SD	Middle	SD	High	SD	F-value
Third	15	6.10	.92	7.40	.69	8.69	1.52	12.57***
Fourth	15	7.68	.97	9.14	1.44	10.25	1.77	12.18***
Fifth	16	8.96	1.54	9.68	1.01	11.11	1.47	10.35***

Third & Fourth grades: df 2,42 (F-value at .001=8.25)

Fifth grade: df 2,45 (F-value at .001=8.25)

***--significant at or beyond the .001 level.

In Table 2, the ability groups within each grade were investigated via T-unit length means across the modes by repeated measures. T-unit length means demonstrate that significant differences occur at all ability levels within each grade level. With the exception of a reversal in the high and middle group means at the fourth-grade level in the argumentation mode, all means are shown to be consistently higher from mode to mode, from ability group to ability group, and from grade to grade.

Table 2

Distribution Across the Modes of T-unit Length

Means by Ability Group at each Grade Level

		Modes[a]					
Ability Group	n	D	N	E	A	df	F-value
Third							
Low	15	5.34	6.34	6.61	7.86	3,56	4.98**
Middle	15	6.02	7.40	7.46	10.62	3,56	11.53***
High	15	7.32	7.90	10.25	12.83	3,56	6.53**
Fourth							
Low	15	6.73	7.30	7.72	10.43	3,56	7.81***
Middle	15	7.29	8.84	9.06	14.63	3,56	20.28***
High	15	8.63	10.60	9.80	13.55	3,56	9.28***
Fifth							
Low	16	7.55	8.91	9.91	11.73	3,60	9.31***
Middle	16	8.28	9.91	10.42	12.77	3,60	9.43***
High	16	9.73	10.80	11.78	14.28	3,60	8.36***

df: 3,56 (F-value at .01=4.16; at .001=6.60)

**--significant at or beyond the .01 level

***--significant at or beyond the .001 level

[a]Modes: D-Description; N=Narration; E=Exposition; A=Argumentation

In Table 3, the full group's T-unit length means were investigated across the modes at each grade level by repeated measures. The results show that a consistent increase from grade to grade occurs in each mode. Within each grade level, the students' productions are shown to be significantly different across the modes, at or beyond the .001 level.

Table 3

Distribution Across the Modes of T-unit Length Means at each Grade Level

		Modes[a]					
Grade	n	D	N	E	A	df	F-value
Third	50	6.20	7.20	8.15	10.42	3,196	18.75***
Fourth	52	7.59	8.91	8.98	12.81	3,204	33.32***
Fifth	51	8.48	9.56	10.42	13.06	3,200	28.22***

df: 3,196 (F-value at .001=5.42)

***--significant at or beyond the .001 level

[a]Modes: D=Description; N=Narration; E=Exposition; A=Argumentation

In Table 4, the average number of clauses occuring inside a T-unit (clauses per T-unit) were investigated across the modes at each grade level, again using repeated measures procedures. At each grade level, the means are shown to differ significantly across the modes, at or beyond the .001 level.

Table 4

Distribution Across the Modes of Clauses per T-unit Means at each Grade Level

		Modes[a]					
Grade	n	D	N	E	A	df	F-value
Third	50	1.04	1.28	1.15	1.51	3,196	24.25***
Fourth	52	1.09	1.43	1.17	1.71	3,204	45.39***
Fifth	51	1.17	1.44	1.30	1.71	3,200	37.50***

df: 3,196 (F-value at .001=5.42)

***=significant at or beyond the .001 level

[a]Modes: D=Description; N=Narration; E=Exposition; A=Argumentation

The final summary table of the grade-level findings shows the results of repeated measures procedures on clause length means across the modes at each grade level. Table 5 illustratrates that clause length means were significantly different across the modes at each grade level, at or beyond the .001 level.

Table 5

Distribution Across the Modes of Clause Length Means at each Grade Level

		Modes[a]					
Grade	n	D	N	E	A	df	F-value
Third	50	5.93	5.72	7.09	6.97	3,196	7.11***
Fourth	52	6.96	6.30	7.67	7.66	3,204	7.37***
Fifth	51	7.27	6.64	8.12	7.72	3,200	7.88***

df: 3,196 (F-value at .001=5.42)

***--Significant at or beyond the .001 level.

[a]Modes: D=Description; N=Narration; E=Exposition; A=Argumentation

Summary of Grade-Level Comparisons

The separate grade-level reports have investigated eight questions, six of which are summarized here as background for the present report. Each question below is followed by a summation of the grade-level findings:

Question #1: Are there differences in general between boys and girls at each grade level regarding reading comprehension scores and written syntactic complexity as measured by three factors: T-unit length, clauses per T-unit, and clause length means?

Findings: At each grade level, the results indicate that boys and girls obtained reading comprehension scores and syntactic complexity means that did not differ by sex.

Question #2: Are there differences between the girls and boys within each of the four modes regarding written syntactic complexity?

Findings: At third and fourth grades, the boys and girls wrote at similar syntactic complexity levels within each mode. In the fifth grade, the boys produced a T-unit length mean in narration that was significantly more complex than the girls. Thus, in only one of the 12 tests over the three grade levels was a significant difference shown between the boys and girls when writing in the same mode.

Question #3: Based on ability groupings, are there differences among the high, middle, and low subgroups concerning written syntactic complexity as measured by the three syntactic factors?

Findings: The different ability groups wrote significantly different levels of syntactic complexity, which increased from low to high at each grade level. The only exception involved the clause length factor which failed to show a significant difference at the fourth-grade level.

Question #4: Are there differences among the high, middle, and low subgroups regarding written syntactic complexity as measured by T-unit length means within each of the modes?

Findings: In the mode of description, the ability groups produced significantly different T-unit length means, which increased from low to high, at each grade level. In the mode of narration, third graders did not produce significantly different T-unit length means by subgroup. In the modes of exposition and argumentation, the subgroups of the fifth grade also failed to show significant differences. At each grade level, however, the T-unit length means of the ability groups showed consistent increases from low to high in each mode.

Question #5: In each of the subgroups, are there significant differences across the four modes regarding written syntactic complexity as measured by the three syntactic factors?

Findings: T-unit length and clauses per T-unit means were shown to significantly differ across the modes for all subgroups at all grade levels. Clause length means produced varied results. The third-grade high group and fourth-grade low group showed significant differences across the modes. The low and middle groups of the third grade and the middle and high groups of the fourth grade failed to show significant differences across the modes. All subgroups at the fifth-grade level produced significant differences across the modes, as measured by clause length means.

Question #6: Based on the full group data within each grade, are there differences across the four modes in written syntactic complexity as measured by the three syntactic factors?

Findings: Looking at the full group data by grade, a consistent picture emerges. In all three factors--T-unit length, clauses per T-unit, and clause length means--the differences in syntactic complexity across the modes are shown to be statistically significant at or beyond the .001 level.

Across-the-Grades Results

One-way analysis of variance procedures were used to measure the differences across the grades in several factors. In addition, a posteriori contrasts were investigated by means of Student-Newman-Keuls (SNK) procedures. The a posteriori contrasts test is a systematic procedure for comparing all possible pairs of group means. In each factor that produces significant differences across the grades the different grade level means are compared to determine between-grade differences. The different group means in each factor are divided into homogeneous subsets (where the difference in means of any two groups in a subset is not significant at the .05 level.) The SNK procedure uses different range values for different sized subsets.

The reading comprehension grade equivalent scores revealed significant differences across the grades. The third grade's mean of 3.04, the fourth grade's mean of 4.23, and the fifth grade's mean of 5.41 differed statistically [$F(2,138)=22.09$]. The SNK procedures showed significant differences between the three grades ($3<4<5$).

In Table 6, the results of the one-way analysis of variance procedures showed T-unit length means as significantly different across the grades, by individual and by combined modes. In description and in the combined modes factor, the differences measured by SNK were significant between all three

grades (3<4<5). In narration and argumentation, the differences by SNK were significant between third and fourth grades but not between fourth and fifth grades (3<4 = 5). In exposition, the differences by SNK were not significant between third and fourth grades but were significant between fourth and fifth (3=4<5).

Table 6

Comparison of T-unit Length Means Across the Grades in the Four Modes

	Grades				
Factors	3rd (N=50)	4th (N=52)	5th (N=51)	F-value	SNK[a]
Description	6.20	7.59	8.48	22.86***	3<4<5
Narration	7.20	8.91	9.56	15.67***	3<4=5
Exposition	8.15	8.98	10.42	9.52***	3=4<5
Argumentation	10.42	12.81	13.06	6.45**	3<4=5
Combined Modes	7.41	9.06	9.91	28.48***	3<4<5

df: 2,150 (F-value at .01 = 4.61; at .001 = 6.91)

**--significant at or beyond the .01 level

***--significant at or beyond the .001 level

[a]SNK=Student-Newman-Keuls a posteriori contrast

Table 7 presents the results of the clauses per T-unit differences by mode across the grades. The one-way analysis of variance procedures showed this factor's means to be significantly different across the grades by individual and by combined modes, although the significance of the differences in the argumentation mode (.05) appeared to wash out in the SNK tests (3=4=5). In description and the combined modes, the differences were significant between all three grades based on the SNK procedures (3<4<5). In narration, the difference between third and fourth grade was significant, but between fourth and fifth grades this difference disappeared (3<4=5). In exposition,

the difference between third and fourth grades was not significant, but it became significant between fourth and fifth graders (3=4<5).

Table 7

Comparison of Clauses per T-unit Means Across the Grades in the Four Modes

Factors	3rd (N=50)	4th (N=52)	5th (N=51)	F-value	SNK[a]
Description	1.04	1.09	1.17	16.89***	3<4<5
Narration	1.28	1.43	1.44	5.81**	3<4=5
Exposition	1.15	1.17	1.30	6.78**	3=4<5
Argumentation	1.51	1.71	1.71	3.39*	3=4=5
Combined Modes	1.19	1.29	1.36	19.33***	3<4<5

df: 2,150 (T-value at .05=3.00; at .01=4.61; at .001=6.91)

*--significant at or beyond the .05 level

**--significant at or beyond the .01 level

***--significant at or beyond the .001 level

[a]SNK=Student-Newman-Keuls a posteriori contrasts

In Table 8, the clause length means by mode across the grades are illustrated, based on the results of one-way analysis of variance procedures and SNK tests. In description, narration, exposition, and the combined modes, clause length means are shown to differ significantly across the grades. In argumentation, clause length means do not differ statistically across the grades. In description, narration, and the combined modes, the differences are significant between third and fourth grades but not between fourth and fifth (3<4=5). In exposition, the differences are not significant between third and fourth or between fourth and fifth; however, there is a significant difference shown between the two homogeneous subsets (3=4<4=5).

Table 8

Comparison of Clause Length Means
Across the Grades in the Four Modes

Factors	Grades 3rd (N=50)	4th (N=52)	5th (N=51)	T-value	SNK[a]
Description	5.93	6.96	7.27	13.16***	3<4=5
Narration	5.72	6.30	6.64	5.71**	3<4=5
Exposition	7.09	7.67	7.66	3.17*	3=4<4=5
Argumentation	6.97	7.66	7.72	2.17 (NS)	3=4=5
Combined Modes	6.21	7.02	7.31	15.68***	3<4=5

df: 2,150 (T-value at .05=3.00; at .01=4.61 at .001=6.91

NS--not significant

*--significant at or beyond the .05 level.

**--significant at or beyond the .01 level

***--significant at or beyond the .001 level

[a]SNK=Student-Newman-Keuls a posteriori contrasts

Across the Grades Conclusions

The findings across the grade levels in this report have yielded further insights regarding syntactic variability and the influence of the modes of discourse in the writing of elementary grade students.

In the T-unit length factor, the variability in written syntax can be traced to the individual modes. Fourth graders write significantly more complex sentences than third graders in the modes of description, narration, and argumentation. Fifth graders write significantly more complex syntax in description and exposition than fourth graders. Thus, it appears those modes that show change based on significantly different syntactic structures may reveal a natural process of change occasioned by the use of the individual modes involved.

In the clauses per T-unit factor, the modes vary in their influence regarding the use of full clauses. Fourth graders use significantly more clauses in their sentences than third graders in the modes of description and narration. Fifth graders use more full clauses in their sentences than fourth graders in the modes of description and exposition. Argumentation, although posting changes that appear consistent, is not shown to be as strong an influence on clause use across the grades.

In the clause length factor, the modes are shown to vary in their influence regarding the lengthening of main and subordinate clauses. However, only between the third and fourth grades do significant differences surface--in the modes of description and narration. However, no one mode can be said to influence the process of lengthening clauses between the fourth and fifth grades.

Thus, part of the explanation for over-all syntactic growth across the three grades can be traced to the increasing number and size of clauses--at least as revealed by the separate modes of discourse. The modes also point to other factors which may account for increased syntactic complexity. For instance, non-clause and reduced subordinate clauses help expand the basic T-unit, but these are not isolated by investigations of either clauses per T-unit or clause length factors.

In addition, written syntactic changes are also occasioned by factors beyond mode. Further research is necessary to investigate the influence of content, audience, personal interest, environment, methods, etc. Such factors remain elusive elements in the study of writing development. Along these same lines, qualitative factors were beyond the concern of this study. All remain prime topics for further research.

Discussion and Implications

The across-the-grades findings have revealed that beginning writers at third-, fourth-, and fifth grade levels may be influenced to a significant degree by the types of writing assignments undertaken--without regard to grammatical elements but with regard to mode. Whether students use description, narration, exposition, or argumentation in their writing program will determine the kinds of structural pathways they experience. Also, the modes may have an envigorating effect on the depth of their future communication skills in writing. For instance, using modes that require more challenging syntactic patterns sets the stage for interweaving ideas through more complex sayings--with the end result being a kind of "stretching" of their underlying syntactic powers.

The most challenging mode appears to be argumentation, based on its T-unit complexity. Each mode, however, appears to play a unique role in the over-all expansion process. For example, at the beginning level, narration and description appear to be the most change-oriented of the modes. That is, children who use these modes undergo syntactic demands that lead to more complex sentences. Depending upon the specific syntactic effect one is interested in, then, the implications for teaching are obvious. However, this may be an over-simplification of what is going on. And it may only reflect current experience (since elementary curricula currently reflect a bias for narration and description rather than the more "difficult" modes.)

Thus, focusing on one mode specifically may miss the point. For instance, based on the findings here, if one is interested in encouraging more clauses in the writing of elementary students, the curriculum would take into consideration the effect of the mode of description across the grades. Yet, it becomes much more difficult to understand the effect of the other modes in relation to this factor. Narration is influential from the third to the fourth grade but not from the fourth to the fifth; exposition is effective between the

fourth and fifth grades, while argumentation appears to make no difference across the grades. Further confusion is added when one considers that the clause length factor reveals different influences by individual mode. The implication is that all the variations caused by the modes apparently work hand-in-hand to allow over-all syntactic growth.

Thus, the question of which mode may be more effective at which grade level bogs down in the subtle syntactic changes occasioned by their over-all use. The resolution is simple: use all four modes as equally as possible at all grade levels.

Limitations of the Study

As with all research undertaken in the schools, no general statement of applicability to any general school population is acceptable. The reader is thus cautioned about interpretations that may or may not involve their schools or curricula. The lack of a random sample obviously is a limiting factor. Although the selection of the schools on the basis of rural, small-town, and suburban populations was possible in this study, they may not necessarily reflect the general population of such schools.

Another limitation, although one that does not weaken external validity, involves the type of writing collected in each mode. For the purposes of the study, a consistent time period was used rather than a cut-off point for the numbers of T-units collected. Thus, the more fluent writers had a better chance of producing more writing than the less capable writers, allowing the more capable writers a heavier say in the end results of the study.

Further limitations surround the amount of writing collected in each mode. Although researchers generally agree that 1,000 words per student provide sufficient and representative samples, beginning writers do not have the facility to produce such large amounts of any type of writing without causing

undue hardship or taxing writing skills to such an extent that the products no longer are representative. Thus, only one writing per mode was collected.

Since the content involved in each mode was different, certain limitations must also be suggested as to the validity of the claims made here. For instance, certain contents may encourage more fluency which may lead to more complex syntax (or vice versa, since no one has studied this problem). However, it is obvious that content may play a role in determining different levels of syntax. What seems obvious here is the way syntax may change in order to fit certain ways of talking about certain types of contents. (For instance, we might write differently about a fantasy trip to Mars than we would about a fantasy trip to the grocery store). Further research is needed to solve this quandary.

General Summary

The over-all results of this three-grade study of written syntactic complexity and the modes of discourse (argumentation, exposition, narration, and description) reveal some insights for teaching writing in the schools.

Mode reveals structural difference in the writing of elementary students, as was first suggested by Seegers and later reaffirmed by San Jose. In this study, mode has been suggested as a natural stimulus to writing development, requiring alterations in the syntactic processes underlying the creation of meaning.

Elementary writers in this study have used more complex syntax in the mode of argumentation than in any other mode. Exposition and narration have been shown to elicit equal amounts of syntactic complexity, while description has elicited the least amount of syntactic complexity in writing. However, as revealed by the underlying changes in the length and number of clauses in the

written T-units, each mode has a unique role to play in influencing more complex statements from the maturing writer.

Also, at different grade levels, the impact of the various modes on writing growth has been shown to differ in unique ways. Not only is mode a factor, but its powers to encourage change and "stretching" in written syntax appear to grow as the writer's cognitive and maturational abilitites grow.

However, the underlying subtleties connected with mode in writing reveal only one part of the developmental process. For instance, the increased syntactic complexity in written argumentation across the grades (as revealed by T-unit expansion) could not be traced to clause changes alone. Thus, non-clause and reduced clause expansion appears to play a more powerful role as the novice's writing powers increase.

This study has concentrated on the influence of mode. There are many other influences on writing development which have yet to be studied as thoroughly. These include the influence of audience, subject matter, personal interest in topic, environment, cognitive development, etc. Such factors most likely will surface someday as important influences on the writer--in as complex a manner as mode. These future findings will also provide the bases for further investigations of the complex interactions involved.

Although our view of the full writing development process is still limited, this study provides a few research-backed and helpful ideas for the teaching of writing in the schools. First of all, the underlying complexities revealed by mode demonstrate the futility of a curriculum which focuses only on surface aspects of the writing act--for instance, increasing the use of grammatical changes, such as reflected in the workbook approach. Children need opportunities to write about <u>everything</u> in their world--<u>in context</u>. Secondly, as illustrated in this study, the different requirements of the modes call forth syntactic

structuring processes which underly mature communication. Thus, all the modes should become basic parts of the writing curriculum.

Thirdly, based on our insights from the study of modes, variety itself appears to provide a unique foundation for growth in writing. Such variety can be utilized immediately, regardless of the areas still unstudied. Subject matter is by nature full of variety. However, different audiences, different levels of personal interest, different writing environments, and unusual as well as normal concepts should be dealt with--in both factual and fictional ways.

Based on the findings of this study it is therefore possible to speculate about basic ingredients in any writing program: Writers need continuous experiences in writing about as many different situations for as many different reasons, about as many different subjects, in as many different styles, (plays, news items, letter writing, etc.), in as many different modes, and for as many different people--as there are writers.

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